

3 15. (New) The method according to claim 14, wherein said cell rate is a Peak Cell Rate PCR in the case of service category of DBR, or Deterministic Bit Rate, or CBR, or Constant bit Rate, type.

4 16. (New) The method according to claim 14, wherein said cell rate is a Block Cell Rate BCR in the case of service category of ABT, or ATM Block Transfer, type.

5 17. (New) The method according to claim 14, wherein said cell rate is an Allowed Cell Rate ACR in the case of service category of ABR, or Available Bit Rate, type.

6 18. (New) A method according to claim 14, wherein said cell rate may be re-negotiated.

7 19. (New) The method according to claim 14, wherein no ATM cell is sent when there is no data available from any of said low bit rate connections, and said method includes a further step of referencing said scheduling step with respect to the next availability of data from at least one of said low bit rate connections.

8 20. (New) The method according to claim 14, wherein said low bit rate connections are assigned different priorities, and said multiplexing step includes an intra-priority multiplexing for multiplexing low bit rate connections of the same priority, and an inter-priority multiplexing for multiplexing low bit rate connections of different priorities.

9 21. (New) The method according to claim 20, wherein said intra-priority multiplexing and said inter-priority multiplexing are both carried out at ATM Adaptation Layer level.

Subs
11 22. (New) A device for generating ATM cells for low bit rate applications, said device comprising:

means for multiplexing a plurality of low bit rate connections into a same ATM connection; and

means for scheduling ATM cell transmission times in a way that as long as there is data available from at least one of said low bit rate connections, wherein ATM cell transmission times are spaced according to a cell rate negotiated for the corresponding ATM connection.

12 23. (New) A base station for a mobile radio communication network, comprising a device for multiplexing low bit rate traffic from a plurality of sources into a same ATM connection for transmission to a base station controller, said device comprising:

means for multiplexing a plurality of low bit rate connections into a same ATM connection; and

means for scheduling ATM cell transmission times in a way that as long as there is data available from at least one of said low bit rate connections, wherein ATM cell transmission times are spaced according to a cell rate negotiated for the corresponding ATM connection.

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11 24. (New) A base station controller for a mobile radio communication network, comprising a device for multiplexing low bit rate traffic from a plurality of sources into a same ATM connection, for transmission to a base station, said device comprising:

means for multiplexing a plurality of low bit rate connections into a same ATM connection; and

means for scheduling ATM cell transmission times in a way that as long as there is data available from at least one of said low bit rate connections, wherein ATM cell transmission times are spaced according to a cell rate negotiated for the corresponding ATM connection.